

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-8 are pending in this application. Claim 7 is amended, and Claim 8 is newly added by the present amendment. New Claim 8 recites features similar to original Claim 1, but is drafted to avoid interpretation under 35 U.S.C. § 112, sixth paragraph. No new matter is presented.

In the Office Action, Claim 7 was rejected under 35 U.S.C. §101; and Claims 1-7 were rejected under 35 U.S.C. §103(a) as unpatentable over Yano et al. (U.S. Pat. 7,123,599, herein Yano) in view of Davies et al. (U.S. Pat. 6,594,493, herein Davies).

Claim 7 was rejected under 35 U.S.C. §101 as directed to non-statutory subject matter. In response, Claim 7 is amended to recite “[a] computer readable medium including computer program instructions, which cause a computer to execute a method of...,” as recommended in the Office Action.

Accordingly, Applicants respectfully request that the rejection of Claim 7 under 35 U.S.C. §101 be withdrawn.

Claims 1-7 were rejected under 35 U.S.C. §103(a) as unpatentable over Yano in view of Davies. Applicants respectfully traverse this rejection, as independent Claims 1, 4, 7 and 8 recite novel features clearly not taught or rendered obvious by the applied references.

Independent Claim 1 is directed to a mobility management node. The node includes mobility management means for correlating a home address in a home network of a mobile node with a c/o address in a network where the mobile node is located after movement, and binding storing means for storing the home address and the c/o address of the mobile node correlated with each other by the mobility management means. A transition detecting means monitors transition of the c/o address stored in the binding storing means, and detects a prefix

of the c/o address before the transition and a prefix of the c/o address after the transition.

Independent Claim 1 further recites, in part, that the mobility management node comprises:

transition history storing means for storing a ***transition frequency*** of the c/o address in correlation with the prefix of the c/o address before the transition and the prefix of the c/o address after the transition detected by the transition detecting means;

paging area forming means for extracting predetermined combinations of the prefix of the c/o address before the transition with the prefix of the c/o address after the transition, ***stored by the transition history storing means, and for generating paging area information by a set of said prefixes included in the extracted combinations***; and

paging area notifying means for notifying the mobile node of the paging area information generated by the paging area forming means.

Independent Claims 4, 7 and 8, while directed to alternative embodiments, recite similar features. Accordingly, the remarks and arguments presented below are applicable to each of independent Claims 1, 4, 7 and 8.

The Office Action cites Yano as disclosing Applicants' invention with the exception of the claimed "transition history storing means," "paging area forming means," and "paging area notifying means." The Office Action then cites Davies as disclosing these claimed features and asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the cited references to arrive at applicants claims. Applicants respectfully traverse this rejection, as Davies fails to teach or suggest the claimed features for which it is relied upon as a secondary reference under 35 U.S.C. §103.

Davies describes a method for dynamically creating paging arrangements aligned with wireless terminals. More particularly, Davies describes that a base station 103 passes to the wireless terminal 101 a list of all the base stations that it knows and are within a prescribed number of handoffs of the first base station.<sup>1</sup> The wireless terminal uses this list to define its own "personal" paging area.

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<sup>1</sup> Davies, Abstract.

Davies, however, fails to disclose “storing a *transition frequency* of the c/o address in correlation with the prefix of the c/o address before the transition and the prefix of the c/o address after the transition... extracting predetermined combinations of the prefix of the c/o address before the transition with the prefix of the c/o address after the transition, *stored by the transition history storing means, and... generating paging area information by a set of said prefixes included in the extracted combinations,*” as recited in independent Claim 1.

As disclosed in an exemplary embodiment at Figs. 4-5 and paragraphs [0038-0042] of the specification, the transition frequency of handoffs between access routers may be used to create a paging area that is uniquely shaped to cover the traversal of a highway 40, 41, for example. Thus, the paging areas are not simply generated based on the proximity of access routers to one another (e.g., number of handoffs between them), but are uniquely shaped taking into account the transition frequency of handoffs between access routers.

In contrast, col. 2, l. 34-col. 3, l. 11 and col. 6, l. 61-col. 7, l. 11 of Davies, cited in the Office Action, describes that a base station is capable of exchanging information regarding other base stations that are within a prescribed number of handoffs from the base station, and this handoff information is then used to formulate a paging area list for a given mobile terminal. More particularly, col. 7, ll. 26-29 of Davies states that “the paging area is a list of all the base stations that are known to the current base station and are within a prescribed number of handoffs of the first base station.” Col. 6, l. 61-col. 7, l. 11 of Davies describes that the base stations are informed of other neighbor base stations when mobile stations perform handoff procedures from an unknown base station, and this information is used to generate the paging area list.

Thus Davies describes storing information indicating the number of handoffs between base station, but fails to disclose storing a *transition frequency* of the c/o address in

correlation with the prefix of the c/o address before the transition and the prefix of the c/o address after the transition, as claimed.

Further, as noted above, Davies merely describes that the paging area list is generated based on a base stations knowledge of base stations within a prescribed number of handoffs. Claim 1, in contrast, recites “extracting predetermined combinations of the prefix of the c/o address before the transition with the prefix of the c/o address after the transition, ***stored by the transition history storing means, and... generating paging area information by a set of said prefixes included in the extracted combinations,***” as recited in independent Claim 1. Thus, the data used in the ***transition history storing means*** (i.e., transition frequency) is extracted to generate the paging area. As Davies fails to disclose storing transition frequencies, the reference also fails to disclose this more detailed aspect of generating paging area information based on this information, as recited in independent Claim 1.

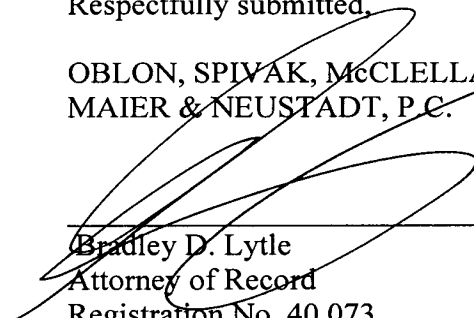
Accordingly, Applicants respectfully request that the rejection of Claim 1 (and Claims 2-3, which depend therefrom) under 35 U.S.C. §103 be withdrawn. For substantially similar reasons, it is also submitted that independent Claims 4, 7 and 8 (and the claims that depend therefrom) patentably define over Yano and/or Davies.

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Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-8 patentably define over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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